

CLAIMS

What is claimed is:

1. A method for computer-aided analysis of a technical system which includes a database with a plurality of diagnoses, comprising the steps of:
associating at least one attribute with the plurality of diagnoses,
associating at least one symptom description representing the technical system with the at least one of the attributes, and
iteratively diagnosing an exception situation of the system by an attribute-related and/or symptom-related analysis of the plurality of diagnoses by
 - based the at least one attribute – identifying and outputting those diagnoses associated with the attribute which have a symptom description with a value that is different from an expected result, and
 - based on an additional attribute – identifying and outputting from the identified diagnoses having a symptom description with a value that is a different from the expected result, the diagnosis associated with the additional attribute.
2. The method of claim 1, wherein the attributes having a symptom description with a value different from the expected result are associated with a corresponding symptom.

3. The method of claim 1, wherein the attributes identified as a symptom are associated with and/or outputted in an attribute list.
4. The method of claim 3, wherein the step of performing the attribute-related and/or symptom-related analysis of the plurality of diagnoses is executed until for one diagnosis all attributes associated with the diagnosis have been identified as a symptom in the attribute list for the exception situation.
5. The method of claim 1, wherein, if a value for a predetermined attribute deviates from the expected result, the diagnosis or each associated diagnosis is assigned to a suspect diagnostic list.
6. The method of claim 1, and further including the step of defining an association function that describes the symptom description associated with the respective attribute, said association function generating a truth value indicating if an attribute value is present as an element among a particular number of values representing the association function, or not.
7. The method of claim 1, wherein the value of an attribute is determined or entered by a user.

8. The method of claim 3, wherein, if a value for a predetermined attribute deviates from the expected result, the diagnosis or each associated diagnosis is assigned to a suspect diagnostic list, and wherein the attributes of the attribute list identified as symptoms and/or the diagnoses of the suspect diagnostic list are outputted in an order that corresponds to a predetermined or predeterminable rank or relevance.
9. The method of claim 8, wherein the diagnosis having the largest number of attributes identified as a symptom is placed in the suspect diagnostic list with the higher rank, and vice versa.
10. A device for computer-aided analysis of a technical system, comprising:
at least one means for storing a plurality of diagnoses having at least one attribute associated therewith, wherein at least one symptom description is associated with the at least one attribute,
first program code means for iterative analysis of an exception situation of the technical system based on a symptom-related and/or or attribute-related analysis of a corresponding diagnosis, wherein based on the corresponding diagnosis an attribute representing the diagnosis and a symptom description of the attribute is determined and checked, and
second program code means for generating an attribute list, wherein the corresponding attribute is transferred as a symptom into the attribute list if the attribute has a value different from an expected result.

11. The device of claim 10, further comprising third program code means for interactively outputting the attribute list, said third program code means capable of evaluating the corresponding diagnosis based on attributes that have not been identified as a symptom.
12. The device of claim 10, further comprising fourth program code means for generating a suspect diagnostic list used in the attribute-related analysis of the corresponding diagnosis based on the at least one symptom description.